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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,571	12/05/2006	Philippe Espiard	290716US0PCT	9056
22850	7590	07/29/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER THOMPSON, CAMIE S	
			ART UNIT	PAPER NUMBER
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			07/29/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/578,571	Applicant(s) ESPIARD ET AL.	
	Examiner Camie S. Thompson	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/1/06; 10/10/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Marten et al., U.S. Patent Number 6,329,473.

Marten discloses an epoxy resin compositions comprising epoxides comprising glycidyl ethers with an epoxide equivalent weight from 100 to 500 g/mol; hardeners such as imidazolines or imidazole such as 2-phenylimidazole present in the amount of 0.01 to 60% by weight; an accelerator such as an amine hardener such as dicyandiamine present in the amount of 0.1 to 2% based on the mass of the hardener component; and additives such as pine oil present in the amount of 0.1-4%; a coupling agent such as silane present in the amount of 0.1 to 3% as required by the present claims (see column 6, lines 38-40; column 10, lines 65-68; column 11, lines 1-10; column 13, lines 16-55; column 14, lines 45-68; column 15, lines 8-10). It is disclosed in column 7, lines 18-34 that the epoxy resin is prepared by the reaction of epichlorhydrin with an alcohol as required by present claim 3. It is disclosed in column 15, line 63-column 16, line 3 and the examples a process for manufacturing a product such as glass with an epoxy resin composition by spraying the composition onto the glass surface and collecting the glass in the form of a sheet and subjecting the sheet to heat treatment to temperatures to 120 degrees C as required by the present claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccini et al., U.S. Patent Number 5,968,645 in view of Marten et al., U.S. Patent Number 6,329,473.

Caccini discloses a sizing composition sprayed onto fibers wherein the fibers are comprised of a glass composition (mineral wool) (see column 6, lines 41-54). The Caccini reference also discloses that the fibers are collected in sheet form as required by present claim 10 (see column 5, lines 50-51 and column 6, lines 51-54). Caccini also discloses that the fibrous materials can be used for thermal and/or acoustic insulation (see column 6, lines 24-28). Caccini discloses that the sheet is passed through an enclosure and heated from 100 to 300 degree C. Caccini does not disclose the sizing composition as required by the present claims.

Marten discloses an epoxy resin composition comprising epoxides comprising glycidyl ethers with an epoxide equivalent weight from 100 to 500 g/mol; hardeners such as imidazolines or imidazole such as 2-phenylimidazole present in the amount of 0.01 to 60% by weight; an accelerator such as an amine hardener such as dicyandiamine present in the amount of 0.1 to 2% based on the mass of the hardener component; and additives such as pine oil present in the amount of 0.1-4%; a coupling agent such as silane present in the amount of 0.1 to 3% as required by the present claims (see column 6, lines 38-40; column 10, lines 65-68; column 11,

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lines 1-10; column 13, lines 16-55; column 14, lines 45-68; column 15, lines 8-10). It is disclosed in column 7, lines 18-34 that the epoxy resin is prepared by the reaction of epichlorhydrin with an alcohol as required by present claim 3. It is disclosed in column 15, line 63-column 16, line 3 and the examples a process for manufacturing a product such as glass with an epoxy resin composition by spraying the composition onto the glass surface and collecting the glass in the form of a sheet and subjecting the sheet to heat treatment to temperatures to 120 degrees C as required by the present claims. The sizing composition of the Marten reference provides a coating that adheres well to a wide variety of substrates. Therefore, it would have been obvious to one of ordinary skill in the art to use the Marten epoxy resin composition as a sizing composition for the Caccini reference to have a thermal and/or acoustic insulation product that has dimensional stability (see Caccini, column 2, lines 46-53

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marten et al., U.S. Patent Number 6,329,473.

Marten discloses an epoxy resin compositions comprising epoxides comprising glycidyl ethers with and epoxide equivalent weight from 100 to 500 g/mol; hardeners such as imidazolines or imidazole such as 2-phenylimidazole present in the amount of 0.01 to 60% by weight; an accelerator such as an amine harder such as dicyandiamine present in the amount of 0.1 to 2% based on the mass of the hardener component; and additives such as pine oil present in the amount of 0.1-4%; a coupling agent such as silane present in the amount of 0.1 to 3% as required by the present claims (see column 6, lines 38-40; column 10, lines 65-68; column 11, lines 1-10; column 13, lines 16-55; column 14, lines 45-68; column 15, lines 8-10). Marten does

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not disclose that the epoxy resin has a water dilutability of at 500% at 20 degrees C. Marten does disclose that the epoxy resin has an EEW within the claimed range. Also, Marten discloses that the epoxy resin of the glycidyl ether type. It is disclosed in Marten that reactive diluents are added to the polyglycidyl ethers in the amount of up to 30%. Therefore, it would have been obvious to one of ordinary skill that the epoxy resin of the present claims have a water diluability of at 500% at 20 degrees C since the epoxy resin of the present claims have the same components with reactive diluents added to decrease the viscosity of the epoxy resin so as to make processing easier (see column 4, lines1-10).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camie S. Thompson whose telephone number is 571-272-1530. The examiner can normally be reached on Monday-Friday 8:00 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1794

Camie S Thompson
Examiner
Art Unit 1794